

Western Red-tailed Skink Distribution in Southern Nevada: Pilot Study Results

The western red-tailed skink (*Eumeces gilberti rubricaudatus*) is a sensitive species that is on the Nevada Natural Heritage Program's "Animal and Plant At-Risk Tracking List." Information about this species is lacking, especially for southern Nevada. A pilot project was initiated in 2006 on portions of the Nevada Test Site (NTS) to (1) develop techniques for determining western red-tailed skink distribution, (2) determine if skinks are still present at historic locations, (3) evaluate habitat use by trapping in a variety of habitats, and (4) collect tissue samples for genetic analysis. Skink capture success was compared in trap arrays with and without drift fences. A total of 9 western red-tailed skinks were captured in 6,092 trap days (0.1%, 1 skink/677 trap days). No skinks were captured in trap arrays with drift fences, which suggests that funnel traps set near rocks or vegetation without drift fences is a viable technique for capturing skinks. This greatly reduces the effort and cost to capture skinks. Skinks were captured at one of the three historic locations. Captures occurred in a variety of habitats including springs, ephemeral washes, and dry rocky areas. Genetic analysis revealed that NTS skinks are part of the Inyo clade, and are most closely related to skinks from slightly further north in Esmeralda County, Nevada, and west into the Panamint and Inyo/White Mountains in California. Results from this pilot study will be used to develop a western red-tailed skink distribution study for the entire NTS.

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